Inside Wallops

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NASA Wallops Conducts Ice Sheet Mapping Missions

The NASA P-3 Orion aircraft with a compliment of scientists and support personnel has spent the past several weeks in Greenland in an effort to observe the current state of the Greenland ice-sheet.

The purpose of Global Ice-Sheet Mapping Orbiter 2007 (GISMO2007) mission is to conduct high and low altitude remote sensing in specified locations over the Greenland ice-sheet and to measure both surface and subsurface topography of the ice-sheet. Researchers have been collecting data that will contribute to the ice-sheet mass determination.

There are several goals of this mission. One of the broad-scaled goals is to observe the current topographic state of the Greenland ice-sheet and to test two sensors. In order to accomplish these goals, the surface elevation of the ice and the bedrock elevation beneath the ice is being measured. The surface elevation is measured using laser altimeters and the bedrock elevation is measured using radar ice-sounders. By collecting both surface and subsurface data, the ice-thickness can be determined, which contributes to the knowledge of the ice-volume.

The data collected on the ice-volume is then compared to previous data collected during missions sporadically since 1991. This study determines the mass-balance, which is a temporal delta of the ice. The mass-balance also describes the gain or loss of the ice-volume as a whole for Greenland. The data from the GISMO2007 mission can be used to examine the state of the ice-sheet.

P-3 Orion aircraft NASA Photo

Four sensors are being flown during this mission. GISMO2007 will test one newly developed NASA Instrument Incubator Program (IIP) sensor, re-fly two previously flown sensors, and fly one university sensor not having previously flown on the P-3.

The GISMO instrument will fly as prime instrument for specific periods of the mission. It is a radar ice-sounder that is part of the NASA Instrument Incubator Program.

The Airborne Topographic Mappers (ATM) is a scanning radar instrument developed at NASA Wallops Flight Facility for the Greenland ice-sheet project. It is primarily used for topographic change detection by repeating measurements over the same area over specific periods.

The Coherent Antarctic Radar Depth Sounder (CARDS), having flown several times in the P-3 aircraft, is the proven ice-sounder for glacier bedrock profiling. It will fly in conjunction with the ATM altimeters to repeat flight paths previous flown during Arctic missions.

The fourth sensor being flown is the Laser Vegetation Imaging Sensor (LVIS). This is being flown to test its use as a high-altitude, high-resolution altimeter.

The entire GISMO2007 mission consists of 14 P-3 flights based out of Sondrestrom and Thule, Greenland.

Dr. Bill Krabill, NASA Wallops Hydrospheric and Biospheric Sciences Laboratory, is serving as a principal investigator on this mission.

Jay Brown Receives Silver Snoopy Award

Photo by Sharone Corbin

Astronaut Paul W. Richards (STS-102) made a surprise visit to Jay Brown in the NASA Range and Mission Management Office on September 20. Richards presented Brown with a Silver Snoopy Award for his many years as the Wallops Test Director supporting space shuttle launches.

Wallops Shorts.....

A NASA scientific balloon was launched from Ft. Sumner, N.M., on September 22.

The 29.47 million cubic foot balloon carried a payload consisting of several instruments to make measurements of the composition of the stratosphere.

Dr. James Margitan, NASA's Jet Propulsion Laboratory, was the experimenter.

Total flight time was 31 hours, 24 minutes. Float altitude was 122,500 feet. The flight was an operations and science success. The payload was recovered.

The weather was great and the Employee Appreciation picnic hosted by the Wallops Exchange and Morale Association Executive Council was well attended.

Photos by Sharone Corbin

Beach Cleanup

The annual Beach Cleanup on Wallops Island netted 1,020 pounds of disposable material. Thanks to Marianne Simko for heading up this year's campaign and to the following participants: Herb and Regena Haugh; Ken, Christina and Willis Yargus; Jeff Benton; Mike and Terri Patterson; Susan and Ellen Dunn; Janet Bradshaw; Wayne Shenton; Carolyn and Brendan Turner; Joel Mitchell; Marianne Simko; Tim Smith; Anthony Monroe; Denise Mix; and Mike Marino.

Photo by Marianne Simko

Joel Mitchell, NASA Wallops Environmental Office, loads trash gathered on Wallops Island.

New Badging Process

NASA Goddard Space Flight Center will begin re-badging all civil servants and contractors in the next few weeks in order to meet requirements of Homeland Security Presidential Directive (HSPD) 12.

The re-badging process requires two visits to Security: one for enrollment and one for badge issuance.

Employees will be notified by e-mail to set up an appointment for enrollment. A website will be provided that allows the employee to select, change, or cancel an enrollment appointment. A confirmation e-mail will be sent with the badging appointment time and location. If you do not have an e-mail address registered in x.500, you will be contacted by telephone or inter-office mail.

Be prompt in responding to your enrollment invitation and keep the appointment you make. If you find you cannot your appointment, follow the instructions in the notification e-mail for changing or canceling appointments.

At your enrollment appointment, Security will verify personal information and scan two proofs of identification other than your current NASA badge. A new photo and an electronic fingerprint scan will be taken and an electronic signature will be obtained. Acceptable forms of identification are listed at: http://code700.gsfc.nasa.gov/HSPD-12/I9docs.doc

You will be notified by email when your badge is ready for pick-up. During badge issuance, you will select a 6 – 8 digit PIN number for your new badge. Have a PIN number in mind when you come to your appointment. The PIN should be something that is easy to remember but not easy to guess. Note: a forgotten PIN will require an additional visit. Your fingerprint will be electronically scanned to ensure it matches the fingerprint provided at enrollment.

The HSPD-12 website (http://code700.gsfc.nasa.gov/hspd-12/) contains additional information about the re-badging effort and HSPD-12.

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